

# **USB** to **VGA** Adapter

User Manual English



LINDY No. 42799

www.lindy.com

# Introduction

Thank you for purchasing the USB VGA Adapter. The USB VGA Adapter enables you to connect an additional display device (CRT/LCD monitor, projector) to your desktop or notebook PC. The connected display can act as mirrored or extended desktop (it can also be used as the primary display) of the main display on your PC. The flexibility of USB 2.0 technology saves the need to open the computer and install a VGA graphics card.

# System Requirements

- Available USB 2.0 port
- Minimum Requirement to use one (1) USB Display Adapter: Intel/AMD Single Core 1.5GHz or higher processor, RAM: 512MB memory or higher
- 2~3 Displays (additional USB display adapters): Intel/AMD Single Core
   2.4GHz or higher processor, RAM: 1GB memory or higher
- 4~6 Displays (additional USB display adapters): Intel/AMD Dual Core 2.0GHz or higher processor, RAM: 2GB memory or higher
- Windows 2000 SP4 / Windows XP SP2 / Windows Vista

# Package Contents

- USB 2.0 to VGA Adapter
- Driver CD
- LINDY Manual

# **Features**

- USB 2.0 compliant
- supports display resolution up to VGA: 1600 x 1200
- Plug-and-Play USB connectivity
- Display Modes: Primary, Extended, Mirror
- Display Rotation: 0°, 90°, 180°, 270°
- Identify Monitors
- Multi-Display Control Panel
- Short-cut to access Windows Display Setting

Resolution	USB-VGA	Refresh Rate Frequency
800 * 600	16bit, 32bit	60Hz,75Hz
1024 *768	16bit, 32bit	60Hz,75Hz
1152 * 864	16bit, 32bit	60Hz
1280 * 720	16bit, 32bit	60Hz
1280 * 768	16bit, 32bit	60Hz
1280 * 800	16bit, 32bit	60Hz
1280* 960	16bit, 32bit	60Hz
1280 * 1024	16bit, 32bit	60Hz
1360 * 768	16bit, 32bit	60Hz
1400 * 1050	16bit, 32bit	60Hz
1440 * 900	16bit, 32bit	60Hz
1680 * 1050	16bit, 32bit	60Hz
1600 * 1200	16bit, 32bit	60Hz

# Installation

#### Windows 2000/XP:

Installing the device driver enables your computer's operating system to recognize the USB VGA Adapter once it's connected. Please check your operating system and refer to the appropriate installation procedure to begin installing the device driver. Please make sure the USB VGA Adapter is **unplugged** from your PC or Notebook before executing the setup program. This section illustrates the simple device driver installation procedure for computer running Windows 2000 / XP operating system.

# Step 1

Insert the Driver CD into the CD-ROM drive; the setup program should be launched automatically. If setup program does not begin automatically, click Start, Run and double click "**D:\Setup.exe**" (where D: is the path of your CD-ROM drive).

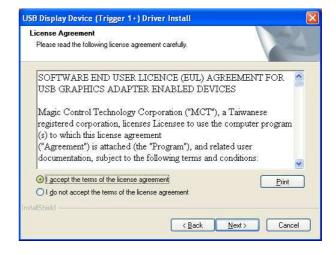
# Step 2

Driver Installation Wizard, click "Next" to continue.



#### Step 3

License Agreement; please read it and select "I accept the terms of the license agreement." Click "Next" to accept the License Agreement.



#### Step 4

The Microsoft Software Installation Certificate warning dialogue box, please select "Continue Anyway" to continue with the device driver installation. This will not affect the device driver installation and the device usage.





#### Step 5

Please select "Yes, I want to restart my computer now". Then, click "Finish" to complete the software installation.



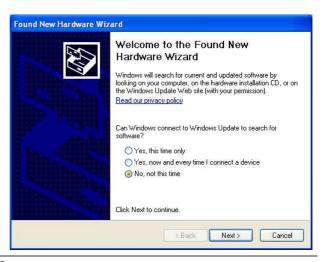
#### Step 6 (After System Reboot)

Please connect the external display device (monitor/projector) to the VGA connector of USB VGA Adapter and switch it on.

Then plug the USB VGA Adapter into an available USB 2.0 port of your PC or Notebook.

#### Step 7

A Hardware Installation Wizard dialog will show up, please select "No, not this time" and click "Next" to continue.



# Step 8

Please select "Install the software automatically (Recommended)". And click "Next" to continue.



# Step 9

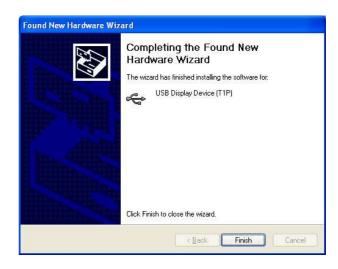
The Microsoft Software Installation Certificate warning dialogue box, please select "Continue Anyway" to continue with the hardware installation. This will not affect the device driver installation and the device usage.

The extended display will be shown on 2<sup>nd</sup> display device.



# Step 10

Click "Finish" to complete the Hardware Wizard.



# Step 11 Installation of multiple USB VGA Adapters

Please plug the additional USB VGA Adapter into an available USB 2.0 port of your PC or Notebook.

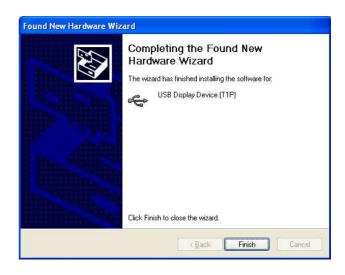
a. A Hardware Installation Wizard dialog will show up, please select "No, not this time" and click "Next" to continue.



 b. Please select "Install the software automatically (Recommended)".
 And click "Next" to continue.



- c. Please select "Continue Anyway" to complete the device driver installation. The extended display will be shown on additional display device.
- d. Click "**Finish**" to complete the Hardware Wizard.



e. If you wish to install additional USB VGA Adapter, please follow the procedure **a~d** again.

To make sure the USB VGA Adapter works correctly, please reboot the computer after the installation.

After rebooting the computer, the USB extended display will be shown on the display device.



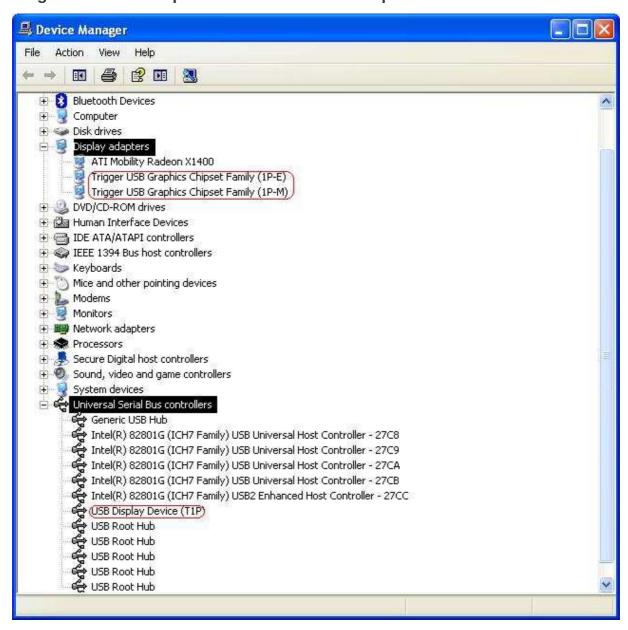
# Verifying the device driver installation

The following procedure allows you to verify the device driver installation.

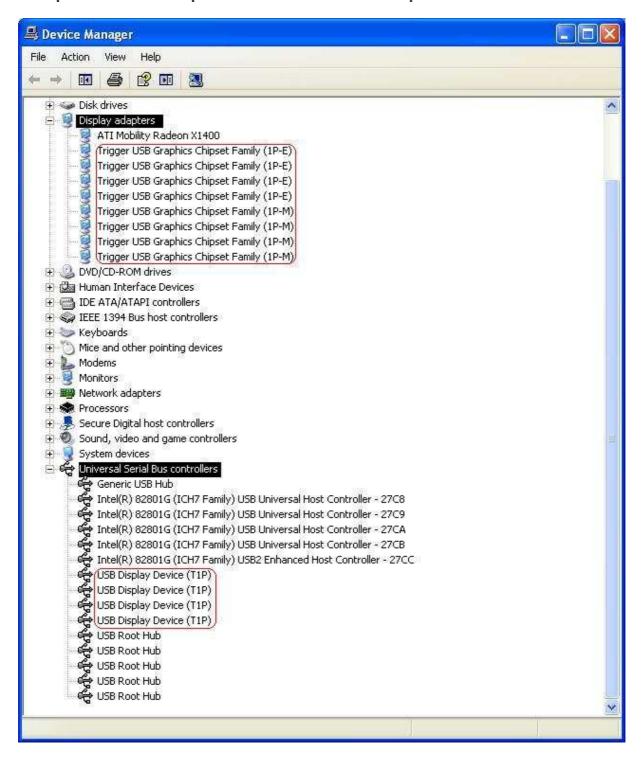
Please right click "My Computer"  $\rightarrow$  "Properties"  $\rightarrow$  "Hardware"  $\rightarrow$  "Device Manager".

Plug-in the USB VGA Adapter, then double click "Display adapters" and "Universal Serial Bus controllers". It will show the new directions as below,

# Single USB VGA Adapter installation on the computer



# Multiple USB VGA Adapters installation on the computer



#### **Device Driver Un-Installation**

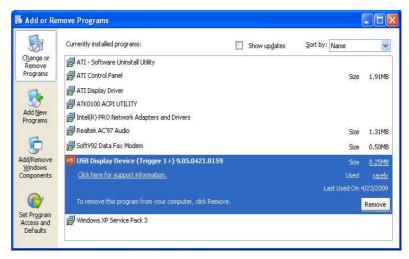
# Step 1.

Start menu:

Click "Start" → "

"Control Panel" →

"Add or Remove Programs"



Select "Substitution USB Display Device (Trigger 1+) 9.xx.xxxx.0159" (driver ver.). Click "Remove" button.

# Step 2. Unplug the USB VGA ADAPTER and click "OK" to continue.



# Step 3.

Select "Yes, I want to restart my computer now" and click "Finish" to reboot.

After reboot, you will complete the driver un-installation.



#### **Windows Vista**

Installing the device driver enables your computer's operating system to recognize the adapter once it's connected. Please check your operating system and refer to the appropriate installation procedure to begin installing the device driver.

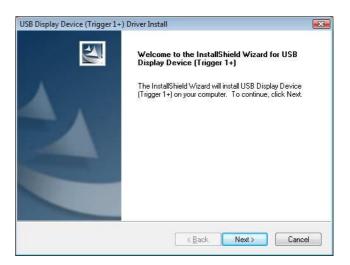
Please make sure the USB VGA Adapter is **unplugged** from your PC or Notebook before executing the setup program. This section illustrates the simple device driver installation procedure for computer running Windows Vista operating system.

#### Step 1

Insert the Driver CD into the CD-ROM drive; the setup program should be launched automatically. If setup program does not begin automatically, click Start, Run and double click "**D:\Setup.exe**" (where D: is the path of your CD-ROM drive).

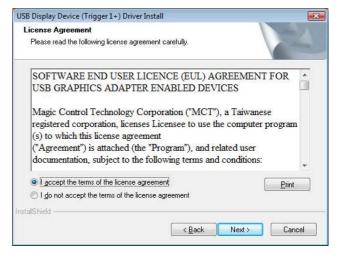
#### Step 2

Driver Installation Wizard, click "Next" to continue.



# Step 3

License Agreement; please review it and check "I accept the terms of the license agreement." Click "Next" to accept the License Agreement.



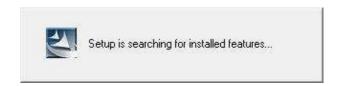
#### Step 4

Windows Security warning dialogue box under Windows Vista, it will not affect the device driver installation and usage the device. Please select "Always trust software from "Magic Control Technology Corp.", then click "Install" to continue.



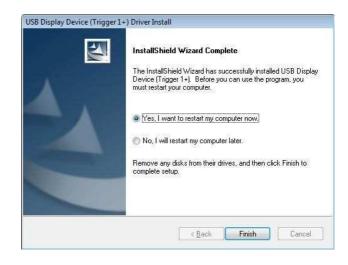
#### Step 5

Setup is searching for installed features.



# Step 6

Please select "Yes, I want to restart my computer now". Then, click "Finish" to complete the software installation.



# Step 7 (After System Reboot)

Please connect the external display device (monitor/projector) to the VGA connector of the USB VGA Adapter and switch it on.

# **Step 8 Hardware Driver Setup Process**

Plug the USB VGA Adapter into an available USB 2.0 port of your PC or Notebook.

The hardware driver setup will begin automatically.

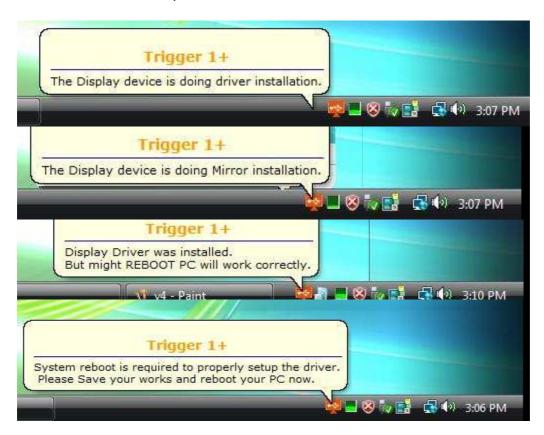
After the driver is configured, you may begin to use the USB VGA Adapter with your display device.



# Step 9 Installation of multiple USB VGA Adapters

Please plug the additional USB VGA Adapters into another available USB 2.0 port of your PC or Notebook.

The setup process will begin automatically. You may see below notification balloons for each additional adapter.



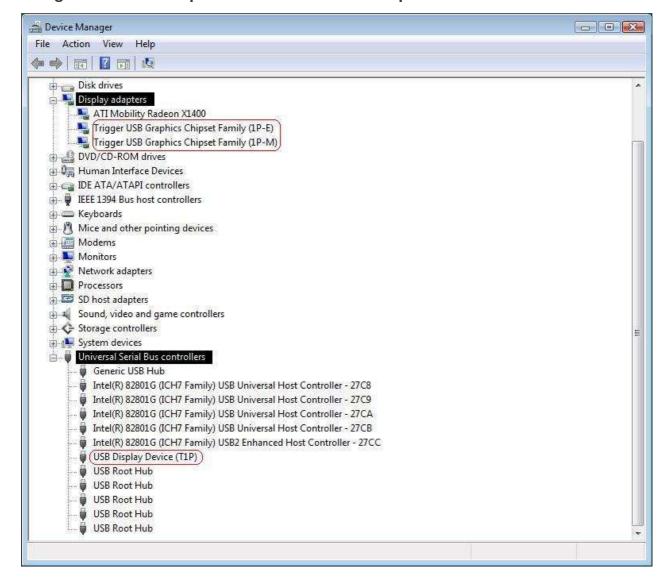
#### **Verifying Device Driver Installation**

The following procedure allows you to verify the device driver installation.

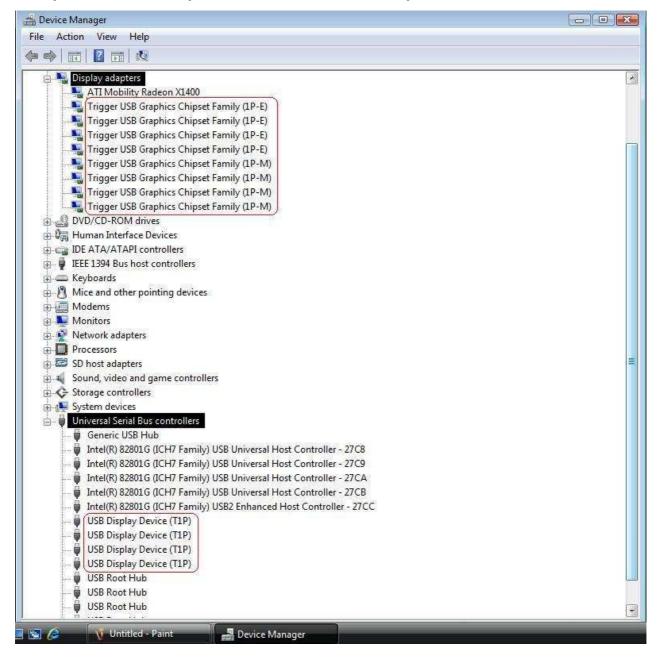
Please right click "Computer" → "Properties" → "Device Manager".

Plug-in the USB VGA Adapter, then double click "Display adapters", and "Universal Serial Bus controllers". It will show the new directions as below,

# Single USB VGA Adapter installation on the computer



# Multiple USB VGA Adapters installation on the computer

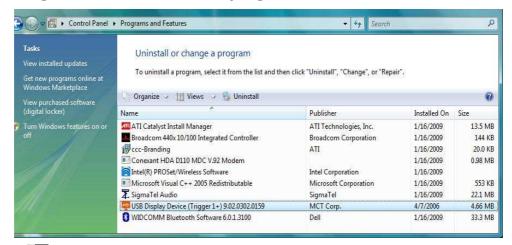


# **Device Driver Un-Installation**

# Step 1 Access Program Uninstall:

Click "Start" → "Control Panel"

Under "Programs", click "Uninstall a program"



Look for "USB Display Device (Trigger 1+) 9.xx.xxxx.0159" (driver ver.) Click "Uninstall" button.

#### Step 2

Unplug the USB VGA Adapter and click

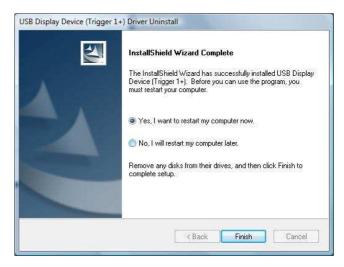
"OK" to continue.



# Step 3

Select "Yes, I want to restart my computer now" and click "Finish" to reboot.

After reboot, you will complete the driver un-installation.



#### **Function Description**

This section describes several friendly functions provided by the USB VGA Adapter. A display device described in this section means devices such as CRT, LCD monitor, TV display, projector.

# Access USB VGA Adapter Utility

Make sure the USB VGA Adapter is attached to the PC.

Look for this on your Windows Start bar.

Right-click this icon to access the variety of functions associated to the adapter.

The first view of the utility, you will notice below sections on the top menu.

# **DISPLAY ID** – Smart Display Device ID Detection

The USB VGA Adapter supports VESA defined DDC/EDID. The utility can show the **display device ID** whenever it is attached to the USB VGA Adapter.

If there is no display device attached to the USB VGA Adapter, an "**Unknown Monitor**" ID will be shown. In some cases, the attached display device does not support

2: [HannStar C17]
4: [UnKnown Monitor]
5: [UnKnown Monitor]
Identify Monitors

Multi-Display Control Panel
Display Settings...

USB Display Device

EDID, in this case the ID will also defined as "Unknown Monitor".

#### **DISPLAY RESOLUTION** – Fast Access to Display Resolution Setting

The default setting resolution is: 1024 \* 768 \* 32bit.



#### **DISPLAY ROTATION**

4 options available: "0°, 90°, 180°, 270° under the Extended or Primary display modes. It is a useful function for some rotatable display device.



#### **DISPLAY MODES**

# "EXTENDED" DISPLAY MODE (DEFAULT)

The default display mode; this feature allows the attached USB display device to work as an "Extended" display of the on-board screen. The extended working space improves work efficiency.

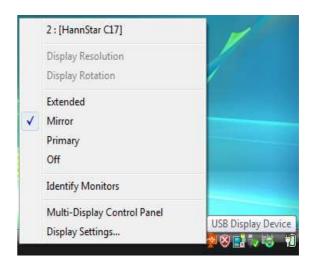
You may change the relative position of the extended USB display device under the Display Settings.

# "MIRROR" DISPLAY MODE

This feature allows the contents of the primary screen to be displayed (mirroring) on the USB display device.

The screen resolution setting on the USB display device will follow the primary screen's resolution. For example, if the primary screen's resolution is 1024x768x32bit, and the USB Display enabled device will be set at the same resolution.





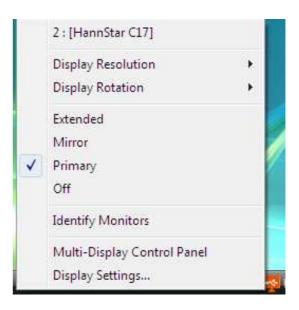
#### "PRIMARY" DISPLAY MODE

A feature to allow the USB display device to act as the main working display. The USB VGA Adapter will work as the main graphics adapter of the computer. The screen connected to the on-board graphics card will then work as the extended display.

Please be advised that some display utilities and drivers that ship with certain AGP and built-in display adapters may prevent this option from working on some systems. You may disable the other utility program usually found in the same toolbar located on the bottom right hand corner) to make this function work properly.

#### "OFF" DISPLAY MODE

This option disables the video output from USB VGA Adapter.





#### **IDENTIFY MONITORS**

Easy display identification via a serial number will be showed on the upper right corner

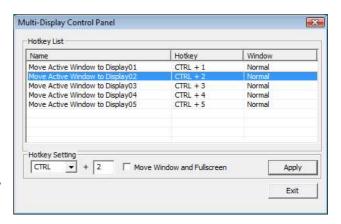
of all attached display devices.



#### **MULTI-DISPLAY CONTROL PANEL**

A feature to allow a much quicker and simpler working experience in a multi-display environment. A series of hotkeys to quickly change active window or cursor to the desired display device (either on-board graphics or each USB Display enabled devices).

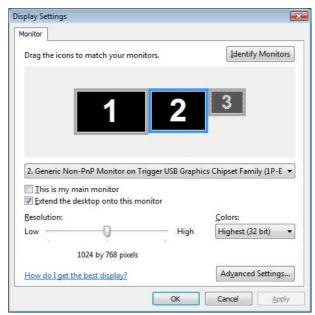
The default setting of hotkeys can be found on the Hotkey List of "Multi-Display Control Panel".



For example: Ctrl + 2 means: change to the window to the Display 2.

#### **DISPLAY SETTINGS**

Fast access to the system "Display Settings".



# Frequently Asked Questions (FAQ)

Q: Why can't I make the USB DISPLAY ADAPTER the primary display?

**A:** Some video cards ship their product with a utility that prevent other video cards from being set as the primary card. Check the bottom right hand corner taskbar for the utility. Disable the utility before switching our adapter to be the primary display.

Q: Why won't my DVD player work when I move it over to the extended display?

**A:** Some DVD playback software packages do not support playing on a second display adapter of any kind. You may try to open the program in the secondary display first before playing the DVD.

**Q:** How come my video will not play on Media Player if I move it over to the extended desktop?

**A:** Check that you have moved the Media Player window completely over to the second screen.

**Q:** Why does my mouse not move pass the right side of the screen as it should on extended desktop?

**A:** Check the display settings and make sure that your display number '2' is on the right side of display number '1'. You can rearrange how Windows treats each display in relation to each other in the Display Properties Settings.

Q: There are lines running horizontally up and down my screen.

**A:** This is due to a low refresh rate setting. You can change this in the Display Properties / Settings / Advanced / Monitor. Make sure you select the USB DISPLAY ADAPTER first and not set the refresh rate higher than what your monitor can support. This may damage your monitor. You can also try to reset/refresh/resynchronize your monitor.

Q: Direct3D does not work?

**A:** This is a current limitation of the adapter. Please check for driver updates in the future to add support for this. If your application requires this, please use the main display adapter.

# Troubleshooting Tips

#### Known Issues

- Windows Vista Aero mode support will be available at MP version driver update (WDDM).
  - WDDM driver update is also aimed to resolve most of video playback compatibility issue under Windows Vista.

 Direct 3D is not supported under XP. It would be supported under Vista Aero mode.

#### General Recommendation

- Check to make sure that the device is plugged in correctly to the host system.
- Make sure that the USB port that you are using is USB 2.0.
- Unplug the USB cable of USB graphics device and re-insert it.
- Check to see that the monitor is connected correctly and is powered ON.
- Make sure to restart your computer after the driver installation.
- Try a different USB 2.0 port and/or computer.
- Unplug all other USB devices from the system.
- Try connecting the USB cable of USB graphics device directly to the computer instead of through a hub.
- Reset/refresh/resynchronize your monitor.

# Media Playback

- During video playback on all platforms, please do not change the display mode, position or arrangement of video player window (such as dragging the video player window between main display and attached display). This usually causes the video player to have strange behavior and the video may stop playing. We suggest stopping the video playback, moving the window to the USB graphics device attached display and then selecting the video clip to start playing.
- You may experience poor video performance on USB graphics device attached display under some low-spec PC system.
- Video rendering using hardware overlays is supported.
- Some DVD playback software packages do not support playing on a second display adapter of any kind. You may try to open the media player in the secondary display first before start playing the DVD.
- Your PC may be lack of certain video codec to support playback of certain video format. Please use the link below to install license free media codec.

K- Lite: http://www.free-codecs.com/download/K Lite Codec Pack.htm

 Video/Media players have different decoding capability under different display modes. For better performance on watching DVD or certain video format on the USB graphics device attached display, it is recommended to use the following

license free software.

VLC Media Player: <a href="http://www.videolan.org/vlc/">http://www.videolan.org/vlc/</a>

Media Player Classic: <a href="http://sourceforge.net/projects/guliverkli/">http://sourceforge.net/projects/guliverkli/</a>

#### Others

- Some graphics card, i.e. Intel, prevents other secondary graphics chipset from being set as the primary card. As the result of this, *primary mode* might not work or the display maybe disabled.

- If you have problems during the boot up process, start your computer in Safe Mode and uninstall the driver. Hold the CTRL key until the Windows startup menu appears and select Safe Mode.
- To verify the driver version that you installed, please click "Control Panel" → "Add or Remove Programs" to check the program: USB Display Device (Trigger 1+)
   9.xx.xxxx.0159 (the number means the driver version).
- Please contact your dealer to obtain the latest driver or for additional assistance if needed.
- Some limitation exists in different media player on file format support. We enclose our compliance test result in the tables according to different operating system, main system graphics card/chipset, media players, and the supported media format. It will be updated periodically with new version of media players or our latest driver.

# CE/FCC & Recycling Information

#### CE Certification

This equipment complies with the requirements relating to electromagnetic compatibility, EN55022/EN55024 class B for IEC/EN61000-4-2/3 the essential protection requirement of Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

#### FCC Certification

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced technician for help

You are cautioned that changes or modification not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference, and
- 2. This device must accept any interference received, including interference that may cause undesired operation.



## WEEE (Waste of Electrical and Electronic Equipment), Recycling of Electronic Products

#### **United Kingdom**

In 2006 the European Union introduced regulations (WEEE) for the collection and recycling of all waste electrical and electronic equipment. It is no longer allowable to simply throw away electrical and electronic equipment. Instead, these products must enter the recycling process.

Each individual EU member state has implemented the WEEE regulations into national law in slightly different ways. Please follow your national law when you want to dispose of any electrical or electronic products. More details can be obtained from your national WEEE recycling agency.

#### Germany

Die Europäische Union hat mit der WEEE Direktive umfassende Regelungen für die Verschrottung und das Recycling von Elektro- und Elektronikprodukten geschaffen. Diese wurden von der Bundesregierung im Elektro- und Elektronikgerätegesetz – ElektroG in deutsches Recht umgesetzt. Dieses Gesetz verbietet vom 24.März 2006 an das Entsorgen von entsprechenden, auch alten, Elektro- und Elektronikgeräten über die Hausmülltonne! Diese Geräte müssen den lokalen Sammelsystemen bzw. örtlichen Sammelstellen zugeführt werden! Dort werden sie kostenlos entgegen genommen. Die Kosten für den weiteren Recyclingprozess übernimmt die Gesamtheit der Gerätehersteller.

#### **France**

En 2006, l'union Européenne a introduit la nouvelle réglementation (DEEE) pour le recyclage de tout équipement électrique et électronique.

Chaque Etat membre de l' Union Européenne a mis en application la nouvelle réglementation DEEE de manières légèrement différentes. Veuillez suivre le décret d'application correspondant à l'élimination des déchets électriques ou électroniques de votre pays.

#### Italy

Nel 2006 l'unione europea ha introdotto regolamentazioni (WEEE) per la raccolta e il riciclo di apparecchi elettrici ed elettronici. Non è più consentito semplicemente gettare queste apparecchiature, devono essere riciclate. Ogni stato membro dell' EU ha tramutato le direttive WEEE in leggi statali in varie misure. Fare riferimento alle leggi del proprio Stato quando si dispone di un apparecchio elettrico o elettronico.

Per ulteriori dettagli fare riferimento alla direttiva WEEE sul riciclaggio del proprio Stato.

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www.lindy.com

